

GLAZIERS, ARCHITECTURAL METAL AND GLASS WORKERS

Minimum Industry Training Criteria

O NET: 47-2121.00

1) Length of Training

Program sponsors shall establish a minimum term of apprenticeship for GLAZIER shall be for four (4) years/seven thousand five hundred (7500) hours. The first seven hundred fifty (750) hours, extending over not more than six (6) months, shall be a probationary period.

2) Related Supplemental Instruction

The required prescribed courses of related and supplemental instruction (RSI) will be 160 hours per year for 3 years. The total of classroom hours required is 480.

The instruction must include at a minimum the related and supplemental training process listed in under work processes.

This instruction must include at a minimum the related and supplemental training processes listed in Attachment "A".

3) On-the-Job Training

The employer shall see that all apprentices are under the supervision of a qualified journeyman or instructor and shall provide the necessary diversified experience and training in order to train and develop the apprentice into a skilled worker, proficient in all the work processes of a trade as outlined herein. Apprentices shall also be trained in the use of new equipment, materials and processes as they come into use in the occupation. Ratio: when the Employer employs one (1) or more Journeymen steadily, it may employ one Apprentice: then one additional Apprentice for the next two (2) additional Journeymen steadily employed thereafter. Skills to be learned are listed in Attachment "B".

4) Competency Testing

All apprentices must pass a competency test prior to the time of their classification advancement to the next higher period. The test shall be based on all Related Supplemental Instruction and manipulative skills tests based on laboratory assignments.

Definition of an Apprentice An apprentice is a person at least 17 years of age, who has met the requirements for selection under the selection procedures, who is engaged in learning a designated Glazing, Architectural Metal and Glass Industry and who has entered into a written apprentice agreement under the provisions of these standards;

and successfully passed the required testing. If the apprentice is under 18 years of age, the agreement must be signed by the apprentice's parent or guardian. When the period of training extends beyond 18, the apprentice agreement shall likewise be binding to such a period as may be covered.

Each apprentice shall satisfactorily perform all work and learning assignments both on the job and in related instruction and shall comply with the rules, regulations and decisions of the apprenticeship committee.

5) Completion Percentages

Program Sponsors must have a 40% graduation rate of all apprentices that satisfactorily complete the first year of the program.

Upon evidence of satisfactory completion of apprenticeship, and upon the recommendation of the apprenticeship committee, each apprentice will be issued a Certificate of Completion by the authority of the California Apprenticeship Council. In recognition of unusual ability and progress, the apprenticeship committee may decrease the term of apprenticeship for an individual apprentice not more than twelve and one-half (12-½ percent).

6) Revisions

The schedule of revisions to the Glaziers, Architectural Metal and Glass Workers Industry training criteria shall be in accordance with Section 212.01 of the California Code of Regulations.

Attachment “A”

Related and Supplemental Instruction Topics for Glazier Industry Standards Criteria

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The apprentice training will include instruction in the following: General Cutting (Glass), General Cutting and Replacements, Mirrors and Specialties Miscellaneous and General Shop, Fabrication of Store Front Metal, Setting of Store Front, Window Wall and Curtain Wall Systems, Doors and Door Hardware, Caulking, weatherization, Insulation, & Green Practices Layout.

Each apprentice shall receive training and education in first aid, safe working practices and in the recognition of occupational health and safety hazards. Each apprentice shall receive training in the recognition of illegal discrimination and sexual harassment.

Training also contains green awareness and green technology duties and task items, which are based on training and skills standards that parallel the current United States Green Building Council (USGBC) LEED rating system for “Green” construction engineering standards.

The Green duties and task items will be as follows:

Zero VOC Commercial Grade Caulks as specified by architects and engineers.

Masking materials made from recycled materials.

Aluminum Extrusions manufactured using recycled aluminum in the process.

Thermally broke aluminum extrusions.

Glass manufactured using recycled glass where possible.

High Performance Glass and Glazing products where specified by architects and engineers.

Backer Rods, Tapes, and Adhesives made using recycled materials.

Green Building Awareness topics will be as follows:

- a. Sustainability and the social, environmental, and economic impact.
- b. The benefits of sustainability.
- c. The purpose of sustainability in commercial and residential buildings.
- d. Professional “**Green**” organizations.
- e. Elements of sustainability.
- f. The importance of green practices.
- g. Green bid specifications.

- h. The elements involved with sustainable sites.
- i. Water efficiency practices.
- j. Energy and atmospheric requirements.
- k. Effective materials and resources.
- l. Indoor environmental quality standards.
- m. The “**Green**” innovation and design process.
- n. The LEED-NC Process.

Total Hours: Minimum 480 Total Program RSI

Attachment “B”

Work Processes for Glazier Industry Standards Criteria

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The employer shall see that all apprentices are under the supervision of a qualified journeyman or instructor and shall provide the necessary diversified experience and training in order to train and develop the apprentice into a skilled worker, proficient in all the work processes of a trade as outlined herein. Apprentices shall also be trained in the use of new equipment, materials and processes as they come into use in the occupation.

The major work processes in which apprentices will be trained (although not necessarily in the order listed) and the approximate hours (not necessarily continuous) to be spent on each are as follows:

WORK PROCESS

General Cutting (Glass)	250 Hours
General Cutting and Replacements	1750 Hours
Mirrors and Specialties	250 Hours
Miscellaneous and General Shop	750 Hours
Fabrication of Store Front Metal	1750 Hours
Setting of Store Front, Window Wall And Curtain Wall Systems	1750 Hours
Doors and Door Hardware	250 Hours
Caulking, weatherization, Insulation, & Green Practices	500 Hours
Layout	250 Hours

The apprentice training also contains green awareness and green technology duties and task items, which are based on training and skills standards that parallel the current United States Green Building Council (USGBC) LEED rating system for “Green” construction engineering standards.

Members of the Committee

<i>Info</i>		<u>Signatory</u>	<u>Non-Signatory</u>
<i>Name</i>	Alex Beltran		No DAS registered programs in this area
<i>Company</i>	DC 16 Glaziers Training (Nor-Cal)		
<i>Street</i>	3393 Arden Road		
<i>City, State, Zip</i>	Hayward, CA 94545		
<i>Phone</i>	510-782-4232		
<i>Name</i>	John Kusper		
<i>Company</i>	NCPFC		
<i>Street</i>	5677 Horton Street		
<i>City, State, Zip</i>	Emeryville, CA 94608		
<i>Phone</i>	510-428-9486		
<i>Name</i>	Tim Davis		
<i>Company</i>	DC 16 Glaziers Training (Nor-Cal)		
<i>Street</i>	3393 Arden Road		
<i>City, State, Zip</i>	Hayward, CA 94545		
<i>Phone</i>	510-782-4232		
<i>Name</i>	Ed Garcia		
<i>Company</i>	DC 36 Glaziers Training (Los Angeles)		
<i>Street</i>	Markon Drive Street		
<i>City, State, Zip</i>	Garden Grove, CA 92841		
<i>Phone</i>	714-894-4094 est. 14		
<i>Name</i>	Luis Sobering		
<i>Company</i>	DC 36 Glaziers Training (San Diego)		
<i>Street</i>			
<i>City, State, Zip</i>			
<i>Phone</i>			

Name Skip Weltz
Company Walters and Wolf Glass Inc.
Street 41450 Boscell Road
City, State, Zip Fremont, CA 94538
Phone 510-490-1115

Name Jim Maggiore
Company Royal Glass Inc.
Street 3200 DeLa Cruz Blvd.
City, State, Zip Santa Clara, CA 95054
Phone 408-969-0444

Name Steve Stewart
Company Signature Glass and Window Inc.
Street 19 Quail Run Circle
City, State, Zip Salinas, CA 93907
Phone 831-754-8855